

Broward County Near Road Monitoring Pilot Study



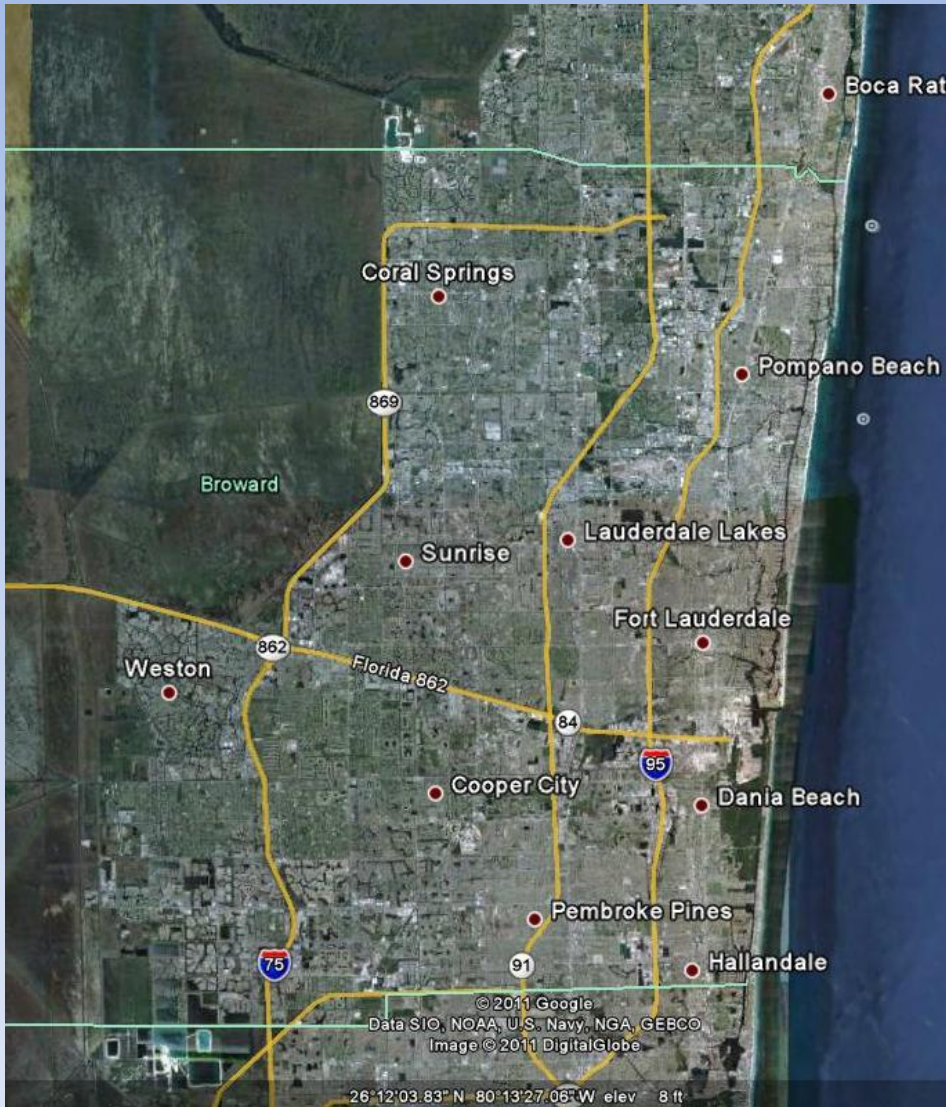
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Broward County Pollution Prevention Remediation and Air Quality Division

U.S. EPA Region 4 – Air Monitoring Workshop

April 27, 2011

Broward County



- Population : 1.75 million residents; over 10 million visitors
- Five major interstates
 - I-95 – running north and south east side of the county.
 - I-595 – running east and west
 - I-75 – west side of the county
 - Florida Turnpike – running north and south parallel to I-95.
 - Sawgrass expressway – east of the everglades

The Plan

- Get the Major players on Board
 - Broward County
 - Director – Pollution Prevention Remediation and Air Quality Division
 - Construction Management
 - Risk Management
 - Purchasing
 - County Attorney's Office
 - Real Properties
 - Facilities
 - Florida Department of Transportation (District 4)

Broward County - Pilot Study

- Phase I
 - Passive Monitoring (6-8 sites)
 - Duration 5-6 weeks
- Phase II
 - Permanent Monitoring Site Development
 - Collection of 6-12 months of data
 - Assist with TAD
 - Presentation to Monitoring community

Miami/Ft. Lauderdale/Palm Beach CBSA : Top 20 ModAADT, using local AADT and local HD counts

COSITE	ROUTE	DESC FRM	DESC TO	AADT Rank	AADT	HD Rank	HD	ModAADT	County
862499	I-95	SR 842/BROWARD BLVD	SR 838/SUNRISE BLVD	1	306000	2	35129	622161	Broward
862493	I-95	SR 84 EB	SR 736/DAVIE BLVD	2	299000	7	16624	448616	Broward
862493	I-95	SR 818/GRIFFIN RD	86095000/EB-I595	2	299000	7	16624	448616	Broward
862493	I-95	86095000/EB-I595	SR 84 EB	2	299000	7	16624	448616	Broward
862498	I-95	SR 736/DAVIE BLVD	SR 842/BROWARD BLVD	3	296000	10	16458	444122	Broward
862455	I-95	SR 822/SHERIDAN ST	SR 848/STIRLING RD	4	281000	16	15624	421616	Broward
862500	I-95	SR 838/SUNRISE BLVD	SR 816/OAKLAND PARK	5	276000	20	15346	414114	Broward
870572	SR-826	N/A	Bridge No-870964	9	260000	11	16380	407420	Miami-Dade
862458	I-95	SR 848/STIRLING RD	SR 818/GRIFFIN RD	6	270000	23	15012	405108	Broward
862394	I-95	SR 824/PEMBROKE RD	SR820/HOLLYWOOD BLVD	7	267000	25	14845	400605	Broward
862454	I-95	SR820/HOLLYWOOD BLVD	SR 822/SHERIDAN ST	8	266000	26	14790	399110	Broward
862504	I-95	SR-814/ATLANTIC BLVD	COPANS RD	16	224000	5	17875	384875	Broward
862501	I-95	SR 816/OAKLAND PARK	SR 870/COMMERCIAL	7	267000	55	11454	370086	Broward
932191	I-95	Bridge No-930189	CONGRESS AVE	24	194000	4	18818	363362	Palm Beach
932191	I-95	N/A	Bridge No-930189	24	194000	4	18818	363362	Palm Beach
932191	I-95	PALMETTO PARK RD	N/A	24	194000	4	18818	363362	Palm Beach
862502	I-95	CYPRESS CREEK RD	SR-814/ATLANTIC BLVD	15	225000	24	15008	360072	Broward
862502	I-95	SR 870/COMMERCIAL	CYPRESS CREEK RD	15	225000	24	15008	360072	Broward
860331	I-95	SR 858/HALLANDALE	SR 824/PEMBROKE RD	11	236138	39	12704	350474	Broward
862487	I-95	DADE CO. LN.	SR 858/HALLANDALE	12	232000	37	12899	348091	Broward

Passive Monitoring Sites

- Selected 7 locations
 - PSD #1 – I-95 SB north of Atlantic Blvd (High HD Traffic Counts)
 - PSD#2 – I-95 SB south of Sunrise Blvd (permanent site and transect site).
 - PSD #3 – I-95 NB south of Sunrise Blvd
 - PSD #4 – I-95 SB north of Stirling Road
 - PSD #5 – I-95 SB north of Sheridan Street
 - PSD #6 – I-95 SB north of Pembroke Road
 - PSD #7 – Site 25 Dania Beach (NO₂, Ozone, Atox)

Passive Monitoring Sites

Status – *It is never easy in Broward County*

- Awaiting General Permits from FDOT
 - Submitted to permit office on March 15, 2011
 - Minimum 30 days to process
- Projected start-up
 - Deploy May 7, 2011 - Ship first batch of samples May 14, 2011



Selecting a Permanent Site

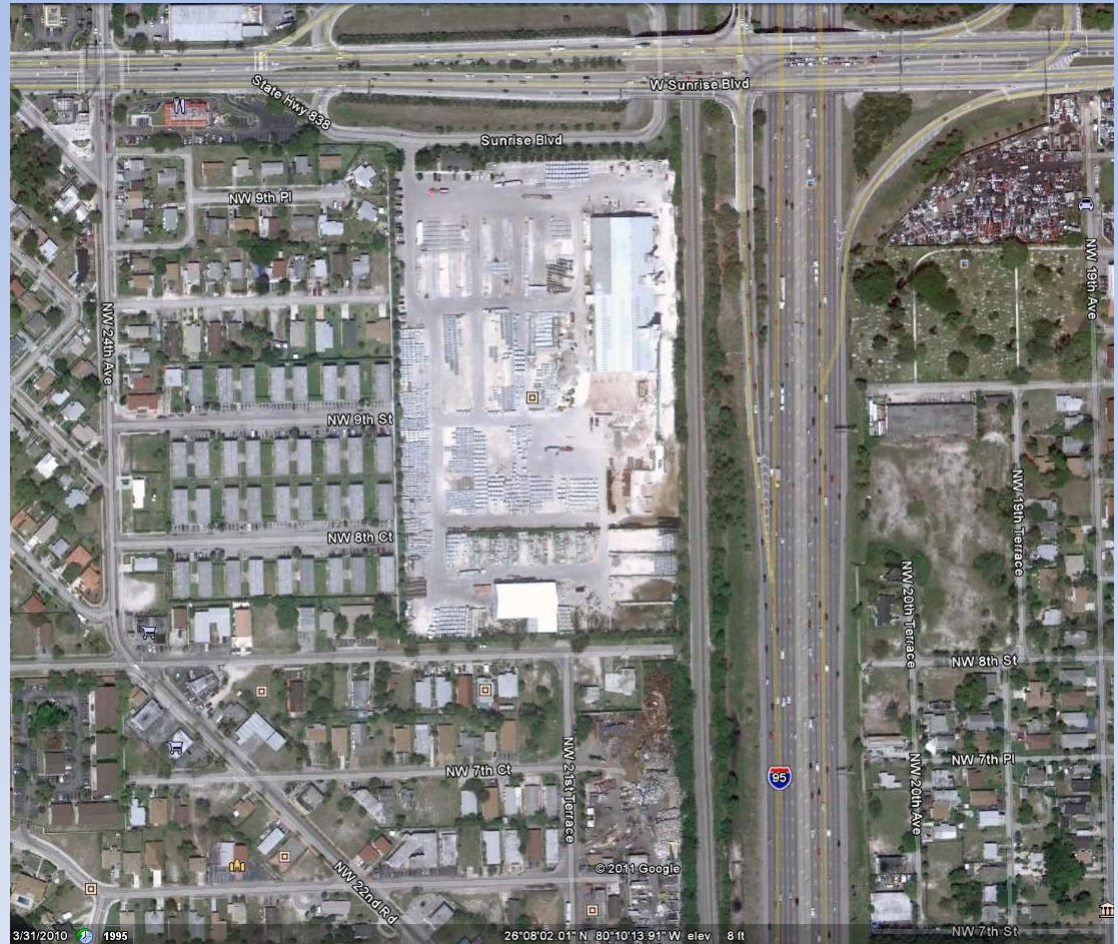
- Criteria
 - Siting Requirements
 - Safety
 - Accessibility
 - Space

Permanent Site – 1-95 South of Sunrise Boulevard



Permanent Site – I-95 South of Sunrise Boulevard

- Highest Traffic Counts
 - Ranked #1 AADT Traffic Counts
 - Ranked #2 HD Traffic Counts
- Space
 - FDOT requires clearance from their clear zone (36 feet).
 - About 100 feet available.
 - Less than 50m siting possible
- Meteorology
 - Site is West of I-95 (winds are predominate out of the east).
- Terrain
 - Flooding possibilities
- Safety
 - Accessible by Sunrise Blvd
 - No barriers



Permanent Site – I-95 South of Sunrise Boulevard

- Status – ***It is never easy in Broward County***
 - Site selected 😊
 - Working on a construction agreement with the State of Florida Department of Transportation.
 - 3 month process after receipt of completed agreement
 - Construction Management assigned a Project Administrator
 - Issues
 - Purchasing
 - Risk Management
 - Permits
 - Survey of property